

**ABSTRACT**

A voice recognition system applies speaker-dependent modification functions to acoustic feature vectors prior to voice recognition pattern matching against a speaker-independent acoustic model. An adaptation engine matches a set of acoustic feature vectors  $X$  with an adaptation model to select a speaker-dependent feature vector modification function  $f()$ , which is then applied to  $X$  to form a modified set of acoustic feature vectors  $f(X)$ . Voice recognition is then performed by correlating the modified acoustic feature vectors  $f(X)$  with a speaker-independent acoustic model.